



03-04-05

IFW

Attorney Docket No. 1438.01PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventors: HUANG et al.)
Application No.: 10/680,449)
Filed: October 6, 2003)
For: RNA INTERFERENCE USING A)
UNIVERSAL TARGET)

Group Art Unit: 1635

Examiner: T. Vivlemore

CERTIFICATE OF EXPRESS MAIL

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Stacey Stamper
Stacey L. Stamper

3/3/05
Date

INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR § 1.97(b)(3)

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Attached is a list of documents on form PTO/SB/08A. Copies of U.S. patents are not being submitted pursuant to Pre-OG Notices <<http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/idswouscopies.htm>> (visited 9/15/2003). Copies of non-patent literature are enclosed pursuant to 37 C.F.R. § 1.98(a)(2).

It is requested that the Examiner consider these documents and officially make them of record in accordance with the provisions of 37 CFR § 1.97 and Section 609 of the MPEP. By submitting the listed documents, Applicants are in no way making any admission as to prior art status of the listed documents, but are instead submitting the listed documents for the sake of full disclosure under 37 CFR § 1.56.

To the best of the undersigned person's knowledge, this Information Disclosure Statement is being submitted in accordance with 37 CFR § 1.97(b)(3), before the mailing of a first Office action on merits.

It is believed that neither an extension of time, nor payment of any fee is required in connection with this communication. However, if an extension of time and corresponding extension fee, or any other fee is required, such an extension of time is hereby petitioned for and the Commissioner is authorized to charge any fees, or credit any overpayment, to Deposit Account No. **50-1627**.

Respectfully submitted,



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Date: March 3, 2005



PTO/SB/08a (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 4 Attorney Docket Number 1438.01

U.S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

Examiner Signature		Date Considered	
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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Sheet	2	of	4	Application Number	10/680,449
				Filing Date	October 6, 2003
				First Named Inventor	Liwen Huang
				Art Unit	1635
				Examiner Name	T. Vivlemore
				Attorney Docket Number	1438.01

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			
		ALDER et al., "Gene Silencing in <i>Caenorhabditis elegans</i> by transitive RNA interference," <i>RNA</i> , 2003, 9:25-32.			
		BARGMANN, "High Throughput Reverse Genetics: RNAi Screen in <i>Caenorhabditis elegans</i> ," <i>Genome Biology</i> , January 31, 2001, 2(2):reviews 1005.1-1005.3.			
		BOUTLA et al., "Induction of RNA interference in <i>Caenorhabditis elegans</i> by RNAs derived from plants exhibiting post-transcriptional gene silencing," <i>Nucleic Acids Research</i> , February 4, 2002, 30(7):1688-1694.			
		BROWN et al., "Stable and heritable gene silencing in the malaria vector <i>Anopheles stephensi</i> ," <i>Nucleic Acids Research</i> , June 13, 2003, 31(15):e85.			
		CHI et al., "Genomewide view of gene silencing by small interfering RNAs," <i>PNAS</i> , May 27, 2003, 100(11):6343-6346.			
		CHICAS et al., "Characteristics of post-transcriptional gene silencing," <i>EMBO reports</i> , September 28, 2001, 2(11):992-996.			
		CHUANG et al., "Specific and heritable genetic interference by double-stranded RNA in <i>Arabidopsis thaliana</i> ," <i>PNAS</i> , April 25, 2000, 97(9):4985-4990.			
		COTTRELL et al., "Silence of the strands: RNA interference in eukaryotic pathogens," <i>TRENDS in Microbiology</i> , January 2003, 11(1):37-43.			
		DILLIN, "The specifics of small interfering RNA specificity," <i>PNAS</i> , May 27, 2003, 100(11):6289-6291.			
		FEINBURG et al., "Transport of dsRNA into Cells by Transmembrane Protein SID-1," <i>Science</i> , September 12, 2003, 301:1545-47.			
		FIRE et al., "Potent and specific genetic interference by double-stranded RNA in <i>Caenorhabditis elegans</i> ," <i>Nature</i> , February 19, 1998, 391:806-811.			
		FIRON et al., "Identifying essential genes in fungal pathogens of humans," <i>TRENDS in Microbiology</i> , October 2002, 10(10):456-62.			
		HAMILTON et al., "Two classes of short interfering RNA in RNA silencing," <i>EMBO</i> , July 16, 2002, 21(17):4671-4679.			
		HAMMOND et al., "Post-transcriptional gene silencing by double-stranded RNA," <i>Nature</i> , February 2001; 2:110-117.			
		HANNON, "RNA interference," <i>Nature</i> , July 11, 2002, 418:244-251.			
		HEIDENCREICH et al., "AML1/MTG8 oncogene suppression by small interfering RNAs supports myeloid differentiation of t(8;21)-positive leukemic cells," <i>BLOOD</i> , April 15, 2003, 101(8):3157-3163.			
		HIMBER et al., "Transitivity-dependent and -independent cell-to-cell movement of RNA silencing," <i>EMBO</i> , July 10, 2003, 22(17):4523-4533.			
		JORGENSEN, "RNA traffics information systematically in plants," <i>PNAS</i> , September 3, 2002, 99(18):11561-11563.			
		KAMATH et al., "Effectiveness of specific RNA-mediated interference through ingested double-stranded RNA in <i>Caenorhabditis elegans</i> ," <i>Genome Biology</i> , 2000, 2(1):research0002.1-0002.9.			

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Sheet	3	of	4	Attorney Docket Number	1438.01
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		KLAHRE et al., "High molecular weight RNAs and small interfering RNAs induce systemic posttranscriptional gene silencing in plants," <i>PNAS</i> , September 3, 2002, 99(18):11981-11986.
		LIPARDI et al., "RNAi as Random Degradative PCR: siRNA Primers Convert mRNA into dsRNAs that Are Degraded to Generate New siRNAs," <i>Cell</i> , November 2, 2001, 107:297-307.
		MALHOTRA et al., "Double-stranded RNA-mediated gene silencing of cysteine proteases (falcipain-1 and -2) of <i>Plasmodium falciparum</i> ," <i>Molecular Microbiology</i> , 2002, 45(5):1245-1254.
		MANGEOT et al., "A universal transgene silencing method based on RNA interference," <i>Nucleic Acids Research</i> , 2004, 32(12):e102 (6 pages).
		MARTENS et al., "RNAi in <i>Dictyostelium</i> : The Role of RNA-directed RNA Polymerases and Double-stranded RNase," <i>Molecular Biology of the Cell</i> , February 2002, 13:445-453.
		NGO et al., "Double-stranded RNA induces mRNA degradation in <i>Trypanosoma brucei</i> ," <i>Proc Natl Acad Sci.</i> , December 1998, 95:14687-14692.
		NISHIKURA, "A Short Primer on RNAi: RNA-Directed RNA Polymerase Acts as a Key Catalyst," <i>Cell</i> , November 16, 2001, 107:415-418.
		PANDOLFINI et al., "Expression of self-complementary hairpin RNA under the control of the ro/C promoter confers systemic disease resistance to plum pox virus without preventing local infection," <i>BMC Biotechnology</i> , June 25, 2003, 3:1-15.
		ROIGNANT et al., "Absence of transitive and systemic pathways allows cell-specific and isoform-specific RNAi in <i>Drosophila</i> ," <i>RNA</i> , 2003, 9(3):299-308.
		SCHULTHEISS et al., "A Small GTP-Binding Host Protein Is Required for Entry of Powdery Mildew Fungus into Epidermal Cells of Barley," <i>Plant Physiology</i> , April 2002, 128(4):1447-1454.
		SCHWARZ et al., "Evidence that siRNAs Function as Guides, Not Primers, in the <i>Drosophila</i> and Human RNAi Pathways," <i>Molecular Cell</i> , September 2002, 10:537-548.
		SHUEY et al., "RNAi: gene-silencing in therapeutic intervention," <i>Drug Discovery Today</i> , October 2002, 7(20):1040-1046.
		SIJEN et al., "On the role of RNA Amplification in dsRNA-Triggered Gene Silencing," <i>Cell</i> , November 16, 2001, 107:465-476.
		TANG et al., "A biochemical framework for RNA silencing in plants," <i>Genes & Development</i> , November 14, 2002, 17:49-63.
		TUSCHUL et al., "Targeted mRNA degradation by double-stranded RNA in vitro," <i>Genes & Development</i> , October 28, 1999, 13:3191-3197.
		VAISTIJ et al., "Spreading of RNA Targeting and DNA Methylation in RNA Silencing Requires Transcription of the Target Gene and a Putative RNA-Dependent RNA Polymerase," <i>The Plant Cell</i> , April 2002, 14:857-867.
		VALDES et al., "Using Double-stranded RNA to Prevent <i>in Vitro</i> and <i>in Vivo</i> Viral Infections by Recombinant <i>Baculovirus</i> ," <i>Journal of Biological Chemistry</i> , May 23, 2003, 278(21):19317-19324.
		VAN HOUDT et al., "RNA Target Sequences Promote Spreading of RNA Silencing," <i>Plant Physiology</i> , January 2003, 131:245-253.
		VANITHARANI et al., "Short interfering RNA-mediated interference of gene expression and viral DNA accumulation in cultured plant cells," <i>PNAS</i> , August 5, 2003, 100(16):9632-9636.
		VAUCHERET et al., "Post-transcriptional gene silencing in plants," <i>Journal of Cell Science</i> , 2001, 114:3083-3091.

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